



XBRITE-DuraView™



G-SENSOR



Uncompromising ultra-portable design

POWERFUL MOBILE PERFORMANCE

Intel® Core™ 2 Duo P9500 processor (2.53GHz¹) with Intel® Centrino® 2 processor technology – the latest chipset from Intel®.

The VAIO® Z notebook comes pre-installed with Genuine Microsoft® Windows Vista® Ultimate with Service Pack 1.

Uncompromising elegance weaved into a 3.4 lb⁷ go-anywhere package.

XBRITE-DuraView™ LCD technology with LED backlight for a brighter, crisper, tougher display.

WIRELESS FREEDOM

Built-in Wireless-N technology offers a boost in wireless connection speed and range³.

Optional Integrated Sprint® Mobile Broadband technology for blazing-fast wireless access beyond LAN networks and hotspots.

Extend the reach of your Z notebook with Stereo A2DP Bluetooth® technology¹⁶ that is ideal for advanced wireless communication and streaming uncompromised CD-quality stereo music to Bluetooth® technology enabled speakers or headphones.

ENDLESS FEATURES

Hybrid graphics system lets you set graphics performance on the fly – no reboot necessary.

An HDMI™ output¹⁷ delivers video and audio to external sources via a single cable so you can enjoy HD entertainment on your compatible big screen TV without a myriad of extra cables (HDMI™ cable sold separately).

A built-in biometric fingerprint scanner makes authentication and secure access quick and easy – you only need your fingerprint.

An integrated Trusted Platform Module (TPM) TCG Ver.1.2 compliant chip enhances security by allowing you to control access on a specific client/user basis.

ENVIRONMENTALLY ENGINEERED FEATURES

Energy-efficient 25 watt Intel® Centrino® 2 processor offers all the performance at lower power consumption.

By using a mercury-free backlit LCD display, the VAIO® Z keeps one less chemical out of both your home and the landfills.

The Z notebook is ENERGY STAR® qualified, which means that it uses less power and reduces greenhouse gas emissions by meeting strict efficiency guidelines set by the Environmental Protection Agency and the Department of Energy.

The VAIO® Z notebook holds an environmental rating of Silver from EPEAT™.

Built tough for business, the VAIO® Z notebook offers the portability of a 3.4 lbs⁷ (with standard battery) form factor with the performance of a larger computer. Encased in durable carbon fiber and featuring scratch-resistant XBRITE-DuraView™ LCD technology, the Z notebook is designed to withstand the rigors of the road.



VGN-Z590UCB

VAIO® Z Series Notebook PC

Specifications

General

Computer Type: Notebook
 Type of Use: Ultra-portable
 Action Buttons: S1, S2, WLAN/Bluetooth® on/off, Performance Select
 Pointing Device: Electro-Static touch pad
 Security: Biometric Fingerprint Sensor
 Trusted Platform Module (TPM) TCG Ver.1.2 compliant

Hardware

Keyboard: QWERTY, 82 keys with 2.5mm stroke and 19.05mm pitch
 Camera: Built-in MOTION EYE® camera and microphone

Processor

Type: Intel® Core™ 2 Duo Processor P9500
 Speed: 2.53GHz¹
 Front Side Bus Speed: 1066MHz
 L2 Cache: 6MB
 Technology: Intel® Centrino® 2 processor technology

Memory

Type: DDR3 SDRAM
 Installed: 3GB¹⁵ PC3-8500 (2GBx1 + 1GBx1)
 Maximum: 4GB¹⁵
 Speed: 1066MHz

Hard Drive

Capacity: 320GB²
 Speed: 5400rpm
 Interface: Serial ATA
 Impact Protection: G-Sensor™ Shock Protection - Hard Disk Drive Protection

Optical Drive #1

DVD+R DL Write: 4x max
 DVD+R Write: 8x max
 DVD+RW Write: 4x max
 DVD-R Write: 8x max
 DVD-RW Write: 4x max
 CD-R Write: 16x max
 CD-RW Write: 10x max
 CD Read: 24x max
 DVD Read: 8x max
 DVD-RAM Write: 5x max
 DVD-R DL Write: 4x max
 BD-R Read: 2x max
 BD-R Write: 2x max
 BD-ROM Read: 2x max
 BD-RE Read: 2x max
 BD-R DL Read: 2x max
 BD-R DL Write: 1x max
 DVD-RAM Read: 5x max
 Blu-Ray Disc™ Support: Yes⁵ (BD-R/BD-RE/BR-ROM/DVD±R DL/DVD±RW/RAM)
 BD-RE DL Read: 2x max
 BD-RE DL Write: 1x max

Expansion Slots

Multimedia Card Reader: One Memory Stick Duo™ media slot with MagicGate® functionality
 One ExpressCard® /34 slot
 One Secure Digital (SD™) memory card) media slot

Audio

Sound System: Intel® High Definition Audio

Display

Screen Size: 13.1"¹⁶
 Resolution: 1600 x 900
 XBRITE-ECO™ Technology: Yes
 Back Light Technology: LED

Graphics

Processor: NVIDIA® GeForce® 9300M GS GPU with Total Available Graphics Memory of 1500MB (max.) and Mobile Intel® Graphics Media Accelerator 4500MHD with Intel® Clear Video Technology with Total Available Graphics Memory: 1300MB (max.)¹⁰
 Video RAM: 256MB of dedicated video RAM
 Technology: Hybrid Graphics System
 Chipset: Mobile Intel® GM45 Express Chipset
 Interface: HDMI™ ¹⁷ and VGA out w/ Smart Display Sensor

Inputs and Outputs

HDMI™ Connection Output(s): 1¹⁷
 Headphone Jack: 1
 Modem Jack: 1
 Microphone Input: 1
 Port Replicator Connector(s): 1 (Bottom)
 USB Port(s): 2 (2.0 compliant)
 VGA Output(s): 1
 DC-In: 1
 i.LINK® Connection: 1 (4pin) i.LINK® connector (IEEE 1394)⁹
 Ethernet Connection (s): 1

Networking/Modem

Ethernet Protocol: 10Base-T/100Base-TX/1000Base-T
 Ethernet Speed: Fast Ethernet (RJ-45)
 Modem Type: Integrated V.92/V.90 Modem (RJ-11)
 Wireless LAN: Intel® WiFi Link 5100AGN(802.11a/b/g/n)³
 Wireless WAN: Optional Sprint® Mobile Broadband Service¹⁸
 Bluetooth® Technology: Integrated Stereo A2DP
 Bluetooth® Technology¹⁶

Power

Battery Type: Standard Capacity Lithium-ion Battery (VGP-BPS12)
 Estimated Battery Life: 2.0 to 6.0 hours¹¹ Standard Capacity Battery
 3.0 to 9.0 hours¹¹ Large Capacity Battery
 Power Requirements: 100W + 10%

Software

Operating System: Genuine Microsoft® Windows Vista® Ultimate with SP1
 Internet Services: AOL® 90-Day Risk Free Trial - New Users Only
 Anti-Virus and Recovery Software: Microsoft® Windows Live™ OneCare™ Trial Version
 Supplied Software: Microsoft® Works SE 9.0 w/ 60-Day Trial Version of Microsoft® Office Home and Student 2007¹⁴
 Sony® Original Software: VAIO® Startup Assistant
 Click to Disc Editor - Import, Edit, Burn
 VAIO® Movie Story - Simple Movie Creation
 VAIO® MusicBox - Music by Mood
 VAIO® Media plus - Multimedia Streaming Software
 *Please access VAIO® Help and Support from your PC for a complete list of software applications and trials.

Service and Warranty Information

Telephone Support: 1 year toll-free technical telephone assistance, available 24/7¹³
 Online and Email Support: Support available from <http://www.esupport.sony.com/EN/VAIO>
 Limited Warranty Term: 1 year limited warranty¹². See actual warranty for details.

Environmental Information

EPEAT™ : Meets Silver EPEAT™ Rating
 RoHS®: Compliant
 For more information: www.sony.com/vaioeco

Regulation and Standard Compliance

Energy Star® Compliant: 4.0

Dimensions

Weight: 3.42 lbs⁷ (with standard battery)
 Measurements: 12.4"(W) x 1.0-1.3"(H) x 8.3"(D)^{7,8}

Supplied Accessories

Standard Lithium-ion battery (VGP-BPS12)
 AC Adapter (VGP-AC19V25)

Power Cable

Optional Accessories

Stick AC Adapter (VGP-AC19V21)
 Port Replicator (VGP-PR21)
 Additional Standard Capacity Battery (VGP-BPS12)
 Large Capacity Battery (VGP-BPL12)
 VAIO® Protection Case (VGP-CKZ11)
 USB Optical Mouse (VGP-UMS20/B)
 Bluetooth Laser Mouse¹⁵ (VGP-BMS33/B)
 Neoprene Case (VGP-AMC1)

Color: Black

1. GHz denotes microprocessor internal clock speed; other factors may affect application performance. CPU speed will be reduced under certain operating conditions.
2. GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary. A portion of hard disk space is reserved as a recovery partition.
3. Requires 802.11n compatible access point. Some functionality may require Internet services, which may require a fee.
4. Broadband Internet service required along with third party services which may require a subscription or other service fee.
5. DVD Media/Formats are not universally compatible.
6. Viewable area measured diagonally.
7. Non-metric weights and measures are approximate and may vary.
8. Measured at the narrowest point
9. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other.
10. Total Available Graphics Memory refers to the new Windows Vista® classification of graphics memory, which varies depending on the operating condition, version of device driver and system memory size.
11. Actual battery life may vary based on product settings, usage patterns and environmental conditions. Battery life will be shorter with models equipped with Instant Mode features.
12. See actual limited warranty for details. For a copy of Sony's warranty, please visit www.sony.com/pcsupport, call toll-free 888-476-6972 (888-4SONYPC) or write to Sony Electronics, 12451 Gateway Boulevard, Fort Myers, FL 33913.
13. For certain third party software applications, Sony provides first level phone support. Additional telephone support may be available from the applicable 3rd party vendor. Availability and schedule for any such support is determined by the applicable software vendor.
14. 60-Day Trial Version of Microsoft® Office 2007 - This trial software will work only for 60 days after you first use it. You will not be able to use the software if you don't activate it as described the first time you use the software. You can activate the software by Internet; Internet service charges may apply. If you want to keep using the software after the 60-day trial period, you must convert to the perpetual version. You can convert online by following the conversion instructions presented during setup and paying the required fees.
15. A portion of the system memory over 3GB may not be available to the operating system.
16. Interoperability and compatibility among Bluetooth® devices varies.
17. Requires high definition-capable display with HDMI™ connector. Image quality will vary.
18. Free Month Offer: Limited time offer. Subject to change. You will be charged a regular monthly fee for your selected connection card plan. A one month service credit will be applied to your account within 1-3 bill cycles. Service credit will be for the amount of the monthly rate charge only. See www.sony.com/sprint for complete offer details, price plans, service terms and conditions, and coverage map. Click the Sprint icon on your VAIO notebook's desktop for service activation. Coverage not available everywhere - see coverage map for details. Credit approval and \$200 early termination fee applies if not cancelled within the first 30 days. Service defaults to Nationwide Sprint PCS Network, where available, if Sprint Mobile Broadband Network is unavailable. Not available while roaming. Terms & Conditions and additional restrictions apply. May not be combined with other offers.

Computer Interface: For this product, there are a multitude of varying software packages and add-on hardware options. This product is not manufactured to work with any specific software, and Sony does not and cannot make any warranty or representation with respect to the performance of this product with any particular software packages and/or non-Sony add-on hardware options except those mentioned here. Sony hereby disclaims any representations or warranties that this product is compatible with any combination of non-Sony products you may choose to connect to it. While Sony representatives or Sony authorized dealers may be able to assist you and may make recommendations, they are NOT authorized to vary or waive this disclaimer. Purchasers must determine for themselves the suitability and compatibility of the hardware and software in each and every particular instance. Software titles pre-installed on the Sony computer are subject to change without notice. Preinstalled software may not be identical to retail versions or have all documentation. Features and specifications are subject to change without notice. This product meets the standards of the International Energy Star Program for energy efficiency. ©2008 Sony Electronics Inc. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Sony, VAIO, XBRITE, DuraView, Memory Stick Duo, MOTION EYE, G-Sensor, MagicGate, and i.LINK are trademarks of Sony in the U.S. and in other countries. Microsoft, Windows, Windows Live, OneCare and Windows Vista are trademarks of the Microsoft Corporation in the U.S. and in other countries. Intel and Centrino are registered trademarks and Core is a trademark of the Intel Corporation in the U.S. and in other countries. Bluetooth is a registered trademark of SIG, Inc. ENERGY STAR is a registered U.S. mark. All other trademarks are trademarks of their respective owners. Printed in U.S.A. 04/08.